# Deconstructing a Game In Scratch to Analyze It

There are several game engines you can utilize to design and build your game. Whichever game engine you choose to create your game it's always important to learn how the audience, elements, and characters in a game work together before going through the game design process.
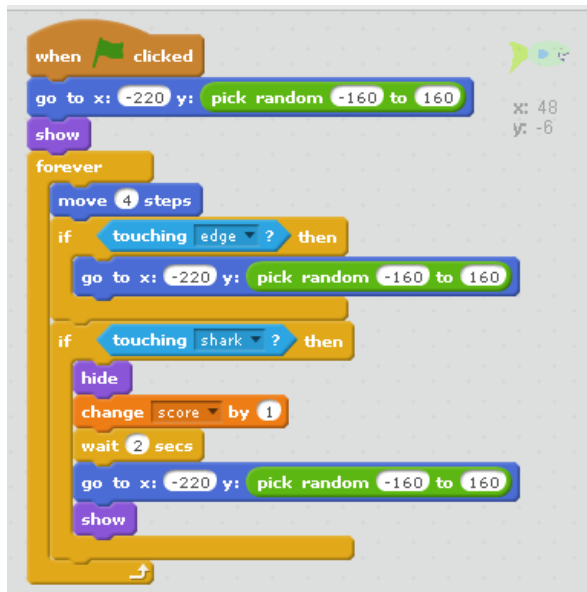
In this activity, you will analyze a game created in Scratch (game engine) and deconstruct it to understand the design process of a game designer.

1. Visit, https://scratch.mit.edu/projects/2370244/ and play the game to understand how it works. Note – play more than once by clicking on the green flag
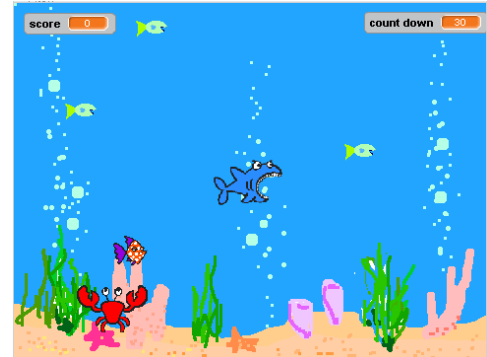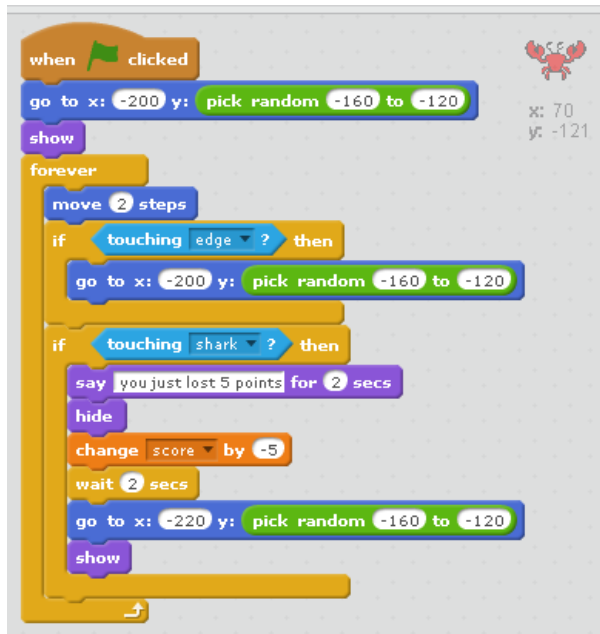
2. What elements do you see in the shark and fish game?

3. How do the elements work together in the game? (Click on the [See inside] button to look at the code.)

Explain what happens when the fish touch the shark?

```scratch
when [flag] clicked
go to x: (-200) y: (pick random (-160) to (-120))
show
forever
  move (2) steps
  if < touching [edge v] ? > then
    go to x: (-200) y: (pick random (-160) to (-120))
  if < touching [shark v] ? > then
    say [you just lost 5 points] for (2) secs
    hide
    change [score v] by (-5)
    wait (2) secs
    go to x: (-220) y: (pick random (-160) to (-120))
    show
```

x: 70
y: -121

Explain what happens when the crab touches the shark?

4. Looking at the code below, how does the audience interact with the game?

```scratch
when [flag] clicked
forever
  if < key [up arrow v] pressed? > then
    change y by (5)
```

x: -30
y: 25

```scratch
when [flag] clicked
forever
  if < key [right arrow v] pressed? > then
    change x by (5)
    point in direction (90 v)
```

```scratch
when [flag] clicked
forever
  if < key [down arrow v] pressed? > then
    change y by (-5)
```

```scratch
when [flag] clicked
go to x: (0) y: (0)
point in direction (90 v)
forever
  switch costume to [shark1-a v]
  wait (0.5) secs
  switch costume to [shark1-b v]
  wait (0.5) secs
```

```scratch
when [flag] clicked
forever
  if < key [left arrow v] pressed? > then
    change x by (-5)
    point in direction (-90 v)
```